

CLAIMS

1. An entrainment device for a centrifugal rotor, which latter comprising
- a rotor body (1), which is rotatable about a central rotational axis (R)
5 and delimits a separation chamber (2), and
- an inlet device (3) which is connected to the rotor body (1) for rotation
with the same and which delimits a central space (4) for receiving of
liquid, which is supplied to the centrifugal rotor, which central space (4) is
in communication with the separation chamber (2), the inlet device (3)
10 comprising
- a central body (13) arranged centrally in the centrifugal rotor and
surrounding said space (4), the central body (13) at its one axial end
having an opening (6) which communicates with said central space (4),
and
15 - an entrainment device having entrainment members (11; 12) arranged
in said space (4) for entrainment of said liquid by the rotation of the
centrifugal rotor, the entrainment device is in such an engagement to the
central body (13) that it is entrained in its rotation and is prevented to
move axially relative the same,
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c h a r a c t e r i z e d i n

- that the entrainment device comprises a first component (14), which
surrounds the rotational axis (R) and has at least one first projection (16),
25 which has a radial extension, and a second component (15), which
surrounds the rotational axis (R) and has at least a second projection
(17), which has a radial extension, the second component (15) being
axially introducible in said central space (4) to a position, in which said
second projection (17) is present adjacent (near, close) said first
30 projection (16), and

- that a locking member (18; 20) is applicable in releasable engagement with said projection (16; 17), when said entrainment device (11; 12) is in place in the central space (4), so that the second component (15) is prevented to move axially relative the first component (14).

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2. An entrainment device according to claim 1, in which the first component (14) is arranged to be fixedly connected to the central body (13).

3. An entrainment device according to claim 1, in which the first component (14) and the central body (13) are formed as one piece.

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4. An entrainment device according to any one of the preceding claims, in which the first component (14) has several first projections (16), which are distributed around the rotational axis and have a radial extension, leaving first interspaces between themselves, and the second component (15) has several second projections (17), which are distributed around the rotational axis and have a radial extension, leaving second interspaces between themselves, said locking member (18; 20) being arranged to be in engagement with several of said projections (16; 17) at the respective components (14; 15).

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5. An entrainment device according to claim 4, in which the second component (15) is axially insertable in said central space (4) to a position, in which said second projections (17) is axially situated at the same level as said first projections (16) at the first component (14) in said first interspace.

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6. An entrainment device according to claim 4, in which the second component (15) is axially insertable in said central space (4) to a position, in

which said second projections (17) have passed said first projections (16) at the first component (14) in said first interspace.

- 5 7. An entrainment device according to claim 6, in which said locking device (18; 20) is substantially annular, is arranged to extend around said rotational axis (R) and is applicable in a space axially formed between the first and the second projections (16; 17) when the second projections (17) have passed the first projections (16).
- 10 8. An entrainment device according to any one of claims 1-6, in which said locking device (18; 20) is substantially annular and arranged to extend around said rotational axis (R).
- 15 9. An entrainment device according to claim 8, in which the substantially annular locking device (18; 20) is resilient so that surrounding parts of the same are movable towards and away from the rotational axis (R).
- 20 10. An entrainment device according to claim 9, in which the substantially annular locking device (18; 20) has a discontinuance in its extension around the rotational axis (R).
- 25 11. An entrainment device according to claim 10, in which the substantially annular locking device (18) has a substantially circular cross-section.
12. An entrainment device according to claim 10, in which the substantially annular locking device (20) has a substantially U-shaped cross-section with the opening directed away from the rotational axis (R).

13. An entrainment device according to any one of the claims 4-12, in which said projections (16; 17) on the one as well as the other component (14; 15) extend radially in the same direction.

5 14. An entrainment device according to claim 13, in which said projections (16; 17) on the one as well as the other component (14; 15) extend radially inwards towards the rotational axis (R).

10 15. An entrainment device according to any one of the preceding claims, in which said projections (16; 17) are arranged to be placed within the central body (13).

15 16. An entrainment device according to any one of the preceding claims, in which the second component comprises at least a third projection (21) extending away from the rotational axis (R) and arranged to be inserted into a recess (22) formed in the central body (13), thereby preventing the relative rotational motion between the second component (15) and the central body (13).

20 17. An entrainment device according to any one of claims 1-16, in which said entrainment member comprises radially and axially extending vanes (12).

25 18. An entrainment device according to any one of claims 1-16, in which said entrainment member comprises a stack of annular discs (11) placed coaxially to said central body (13) and each other.